

In the Claims

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

1. (Currently Amended) A method for detecting an analyte containing ~~or labelled with~~ a haem moiety within a sample, said the method comprising:

- a) contacting said the sample with a one or more magnetic ~~bead~~ beads having immobilised thereon a specific binding partner for said the analyte and allowing the analyte to bind to said the specific binding partner;
- b) separating the magnetic beads from the sample, ~~and if necessary, labelling the immobilised analyte with a haem containing label;~~
- c) ~~resuspending the beads and~~ subjecting the beads to alkaline conditions sufficient to release haem moieties ~~therefrom but not to extract inorganic iron from the beads; and~~
- d) detecting released haem moieties using a luminol chemiluminescent assay procedure.

2. (Currently Amended) A The method according to of claim 1 wherein ~~in~~ step (c) is conducted within a pH range of from ~~12.5-13.5~~ 12.5 to 13.5.

3. (Currently Amended) A The method according to of claim 1 ~~or claim 2~~ wherein the beads are resuspended in step (c) and step (d) is carried out directly on the bead suspension.

4. (Currently Amended) A The method according to of claim 1
~~or claim 2~~ wherein the beads are resuspended in step (c); after step (c) “;” the
magnetic beads are separated “;” from the suspension; and step (d) is carried out
on supernatant remaining the separated suspension.

5. (Currently Amended) A The method according to any one of
the preceding claims claim 1 wherein between step (b) and step (c), the magnetic
beads are resuspended in a washing solution, and thereafter, separated from the
washing solution.

6. (Currently Amended) A The method according to any one of
the preceding claims claim 1 wherein the analyte is a spore.

7. (Currently Amended) A The method according to of claim 6
wherein the analyte is a *Bacillus* spore.

8. (Currently Amended) A method according to any one of
claims 1 to 5 ~~wherein the analyte is labeled with a haem containing moiety~~ The
method of claim 1 wherein in step (c) the alkaline conditions are sufficient to
release haem moieties without extracting inorganic iron from the beads.

9. (Cancelled)

10. (Currently Amended) A The method according to any one of
the preceding claims claim 1 wherein in step (d) luminol is added to and incubated
with the released haem haem moieties and incubated therewith, and thereafter,
oxidant added in a sufficient amount to generate the a signal.

11. (Currently Amended) A The method according to of claim
10, wherein the amount of oxidant present is sufficient to oxidise all of the
luminol.“;”

12. (Currently Amended) A The method according to claim 10
~~or 11~~ wherein the oxidant is sodium perborate or hydrogen peroxide.

13. (Currently Amended) A The method according to any one of
~~the preceding claims~~ claim 1 wherein the specific binding partner for the analyte is
an antibody or binding fragment thereof.

14. (Currently Amended) A kit for ~~use in a method according to~~
~~claim 1, said kit detecting an analyte in a sample, wherein the analyte contains a~~
~~haem moiety or is labelled with a haem moiety,~~ comprising magnetic beads,
luminol or functional chemiluminescent derivatives thereof and a working solution
having a pH within the range of from ~~12.5-13.5~~ 12.5 to 13.5.

15. (Currently Amended) A The kit according to claim 14
wherein ~~said~~ the magnetic beads are coated with a specific binding partner for an
analyte.

16. (Currently Amended) A The kit according to claim 15
wherein ~~said~~ the specific binding partner is an antibody.

17. (Currently Amended) A The kit according to any one of
~~claims~~ claim 14 to 16, which further comprises an oxidant ~~for luminol~~.

18. (Currently Amended) A The kit according to claim 17
wherein the oxidant is sodium perborate or hydrogen peroxide.

19. (Currently Amended) A method according to ~~claim 1~~
~~substantially as hereinbefore described with reference to the Example for detecting~~
~~an analyte labelled with a haem moiety within a sample, the method comprising:~~

- a) contacting the sample with one or more magnetic beads having immobilised thereon a specific binding partner for the analyte and allowing the analyte to bind to the specific binding partner;
- b) separating the magnetic beads from the sample;
- c) subjecting the beads to alkaline conditions sufficient to release the haem moiety from the beads; and
- d) detecting the released haem moiety using a luminol chemiluminescent assay procedure.

20. (New) The method of claim 19 wherein the haem moiety is a horseradish peroxidase labelled antibody specific for the analyte.